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**AP Biology Population Ecology (Chapter 44 Outline)**

*Vocabulary*: Define in your own words

Ecology-

Biosphere-

Demography-

Limiting factors-

Biotic potential-

Cohort-

Semelparity-

Iteroparity-

Carrying Capacity-

Competition-

Predation-

Demographic transition-

Zero population growth-

**Respond to the following prompts/questions:**

Identify the ecological levels that exist within the field of ecology. Provide an example of each level of ecological organization. (4 pts)

Discuss the difference between population density and population distribution. (2 pts)

What are the differences between type I, type II, and type III survivorship curves? Be specific in your response. (3 pts)

Describe the appearance of age structure diagrams for the following situations: increasing populations, stable populations, and decreasing populations. Discuss how each age class (pre-reproductive, reproductive, and post-reproductive) is represented in each age structure diagram. (6 pts)

Compare and contrast exponential and logistic growth models for populations. Describe the conditions that must exist for each type of population growth to occur and provide an example of a population that displays each growth model. (6 pts)

Explain how carrying capacity (K) limits exponential growth. (1 pt)

Compare and contrast density-independent and density-dependent factors that affect population size. Provide a specific example of each factor. (3 pts)

Compare and contrast the two life-history strategies for organisms. Describe each life-history strategy in detail and provide an example of an organism that displays that type of strategy. (6 pts)

How does human population growth affect the Earth's resource? How is the environmental impact of a population measured? Explain. (3 pts)

Compare and contrast more-developed countries (MDCs) and less-developed countries (LDCs). How does the consumption of resources by LCDs affect MDCs? Explain. (3 pts)

***ABOUT THE READING:***

Write three things that you learned about Population Ecology*:*

*Make sure to write a full sentence.*

*Example: I learned that doubling time refers to the amount of time required for a population to double in size.*

*1.*

*2.*

*3.*